



# UNITED STATES PATENT AND TRADEMARK OFFICE

*en*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/772,970

02/05/2004

Charles A. Miller

P199-US

5200

50905

7590

08/09/2006

N. KENNETH BURRASTON

KIRTON & MCCONKIE

P.O. BOX 45120

SALT LAKE CITY, UT 84145-0120

EXAMINER

CHAN, EMILY Y

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 10/772,970		<b>Applicant(s)</b> MILLER, CHARLES A.	
	<b>Examiner</b> Emily Y. Chan		<b>Art Unit</b> 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/12/05</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of claims 16-30 in the reply filed on 6/23/06 is acknowledged.

***Claim Rejections - 35 USC § 102***

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 16-30 are rejected under 35 U.S.C. 102(a) as being anticipated by Slusky US patent No. 6,885,202.

With respect to claim 16, Slusky ('202) discloses a semiconductor wafer ( see Fig. 2, 30) comprising:

a plurality of dies (12) each comprising functional circuitry (see Col. 2, line 47 " to test electronic circuits 12 on wafer 30"); and

electrically conductive structures ( wireless I/O cells 14) configured to contactlessly receive test signals (see Col. 2, lines 4-5) for testing the functional circuitry (see Col. 2, lines 52-54).

With respect to claim 17, Slusky ('202) discloses that each die (12) comprises a set of said conductive structures (wireless I/O cells 14).

With respect to claim 18, Slusky ('202) discloses each of said conductive structures (wireless I/O cells 14) in a set of said conductive structures are electrically connected to a plurality of said dies (12) (see Fig. 2).

With respect to claim 19, Slupsky ('202) discloses that the conductive structures are electromagnetically (see Col. 2, line 34, "a magnetic interface for sending and receiving signals") coupleable to a tester interface device (38).

With respect to claim 20, Slupsky ('202) discloses that a transmitter (18) (see Col. 2, line 31 "transmitter 18") configured to transmit test signals on at least one of said conductive structures (wireless I/O cells 14).

With respect to claim 21, Slupsky ('202) discloses each of said dies (12) comprises such a transmitter (18) (see Fig. 1).

With respect to claim 22, Slupsky ('202) discloses that a receiver (34) (see Col. 2, line 33 "receiver 34") configured to receive a test signals on at least one of said conductive structures (wireless I/O cells 14).

With respect to claim 23, Slupsky ('202) discloses each of said dies (12) comprises such a receiver (34) (see Fig. 1).

With respect to claim 24, Slupsky ('202) discloses that a transceiver (18, 34) (see Col. 1, "a transceiver 18"), configured to transmit test signals on at least one of said conductive structure(wireless I/O cells 14) and to receive a test signal induced on at least one of said conductive structures(wireless I/O cells 14).

With respect to claim 25, Slupsky ('202) discloses that each of said dies (12) comprises such a transceiver (see Fig. 1).

With respect to claim 26, Slupsky ('202) discloses a built in self test circuitry (see Col. 3, "using BIST (Built-In Self Test) techniques").

With respect to claim 27, Slupsky ('202) discloses a semiconductor wafer (see Figs. 1-5) comprising:

a plurality of dies (12) each comprising functional circuitry and terminals; and means ( wireless I/O cells 28) for receiving a test signal from a tester channel ( see Fig. 2 wireless connection ) without physically contacting said tester channel.

With respect to claim 28, Slupsky ('202) discloses means (38) for sending a test signal to a test channel without physically contacting said tester channel.

With respect to claim 29, Slupsky ('202) discloses that the means (wireless I/O cells 28) for receiving receives a plurality of test signals from a plurality of tester channels without physically contacting said plurality of tester channels (see Fig. 2)

With respect to claim 30, Slupsky ('202) discloses a means ( computer 36) for controlling communications with a plurality of said tester channels (see Col. 2, lines 55-56).

Therefore, Slupsky ('202) anticipates the claimed invention.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 16-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Khandros et al US Publication No. 2005/0086021.

Khandros et al ('21) disclose a semiconductor wafer ( see Fig. 1) comprising:

a plurality of dies each comprising functional circuitry; and electrically conductive structures configured to contactlessly receive test signals for testing said functional circuitry. Khandros et al ('21) also discloses that each die comprises a transmitter, receiver and transceiver as claimed.

Therefore, Khandros et al ('21) anticipates the claimed invention.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pileggi et al US Publication No. 2005/0138499 disclose a system to test integrated circuit on a wafer comprising a transceiver formed on the wafer.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Y. Chan whose telephone number is 571-272-1956. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha T Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2829

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EC  
8/6/06

  
**VINH NGUYEN**  
**PRIMARY EXAMINER**  
A-2829  
08/07/06